

**CURRENT CLAIMS**

1           1.     A method of inducing expression of at least one gene in a cultured cell,  
2 comprising the steps of:  
3           culturing at least one cell;  
4           contacting said cell with a transcription factor decoy oligonucleotide sequence  
5 directed against a nucleotide sequence encoding a shear stress response element; and  
6           determining the expression of said gene in said cell.

1           2.     The method of claim 1, wherein said oligonucleotide comprises a terminal  
2 phosphothiorate moiety and a phosphodiester backbone.

1           3.     The method of claim 1, wherein said oligonucleotide passes cell  
2 membranes and accumulates in the nuclear compartment of said cell.

1           5.     The method of claim 1, wherein said cultured cell is selected from the  
2 group consisting of an epithelial cell and an endothelial cell.

1           6.     The method of claim 4, wherein said cultured cell is selected from the  
2 group consisting of renal cortical cell, renal fibroblast cell, hepatocyte, pancreatic islet,  
3 renal interstitial cell, parathyroid cell, thyroid cell, pituitary cell, ovarian cell and  
4 testicular cell.

1           7.     The method of claim 1, wherein said cultured cell is grown in two  
2 dimensional culture.

1           8.     The method of claim 1, wherein said shear stress response element is  
2 selected from the group consisting of GAGACC and GGTCTC.

1           9.     The method of claim 1, wherein the gene encodes a protein selected from  
2 the group consisting of megalin, cubulin, erythropoietin and 1-a-hydroxylase.

1           10.    The method of claim 1, wherein the concentration of said oligonucleotide  
2   is from about 10 nM to about 10 mM.

1           13.    A method of claim 1, wherein said cultured cell is grown in a rotating wall  
2   vessel.